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ABSTRACT

Forty-three students in a developmental English course participated in a study to discover whether students' writing would improve and their satisfaction with the course would be increased if they were permitted to revise their papers after the papers were marked but before they were graded rather than after the papers were both marked and graded, as is traditional. One section of the course was the experimental group and a second section was the control group. Pretest compositions were assigned at the beginning and posttest compositions were assigned at the end of the course. The sections were taught by the same instructor in the same way except for the order of mark-grade-revise. A semantic differential was used to discover what differences in course evaluation might occur between the two sections. Writing improvement was measured in terms of growth in the length of T-units between the pretest and posttest compositions, and frequency of errors was calculated. No statistical differences between the two groups were found in terms of writing improvement nor in terms of course satisfaction, but there was a significant decrease in the frequency of errors within the experimental group. (TJ)

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A QUASI-EXPERIMENTAL STUDY OF COMPOSITION REVISION FOR DEVELOPMENTAL STUDENTS IN A TECHNICAL INSTITUTE

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In the 1974-75 session, State Technical Institute at Memphis was an open-door post-secondary institution offering associate degrees and certificates in technical fields. As an open-door institution, it admitted all applicants who possessed a high school diploma or its equivalent. Many of these applicants scored below 14 on the English portion of the American College Test (ACT) and, upon admission, were placed in the English program available in the Department of Developmental Studies. A score of less than 14 placed the applicant in the bottom quartile of public two-year college applicants. The English offerings of the Department of Developmental Studies were of a pre-college or preparatory nature. Although some students enrolled in developmental courses on an elective basis, either for review or for institutional credit towards a certificate or applied science degree, most enrollees were in need of corrective work in English.

NATURE OF THE STUDY

At the time of this study, the usual procedure in the writing classes of the Department of Developmental Studies at State Technical Institute at

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Memphis was for the students to revise their compositions after they were marked by the instructor and assigned grades. The rationale behind this rather common practice among English instructors was that revision enabled the students to produce better compositions in the future. But to developmental students in an open-door post-secondary technical institute, the motivational force of delayed rewards was less than optimum. Instead, developmental students in a technical institute sought practical goals with immediate rewards.

It was proposed that if students in a developmental English course were permitted to revise their compositions after they were marked by the instructor, but before they were graded, the students would show greater improvement in writing and express more satisfaction with course procedures in writing and revising compositions than students whose papers were handled in the traditional manner.

To test these assumptions, two intact sections of Communication I were chosen for study in the 1975 winter quarter, and a nonrandomized pretest-posttest control group design was established. The two sections were taught by the researcher in the same manner except for the treatment variation applied to each section. The treatment applied to the 21-member control group was designated the mark-grade-revise technique of composition revision, and the treatment applied to the 22-member experimental group was designated the mark-revise-grade technique.

METHODOLOGY

Each student wrote three pretest compositions on three different topics. The first composition was in the descriptive mode, the second in the narrative mode, and third in the espository mode. Each student received the same set

of written instructions for each mode of writing. The instructions suggested topics and specified that no assistance could be received but that the assignments were for information only and not for grades. (Students were not told that they were participating in an experimental study.)

The pretest compositions were written in class during the first two weeks of the quarter. Although the pretest instructions specified for each composition a length of 175-200 words, lengths ranged from 156-517 words with a mean of 219.1 words. During the first two weeks, whenever students were not writing pretest compositions, they worked on traditional exercises on subjects, verbs, and simple sentences in Chapter 2 of the course worktext, The Writing Clinic (Loewe, 1973).

For the next six weeks students continued working in the worktext in Chapters 3, 4, and 5, which covered simple sentence patterns, agreement of subject and verb, compound sentences, fused sentences, and comma splices. In addition, each student wrote one paragraph per week, of 90-110 words, which he corrected and rewrote until all errors in grammar, usage, punctuation, and spelling were eliminated after they were marked by the researcher-instructor using a set of correction symbols. The mark-grade-revise technique of revision was applied to the control group, and the mark-revise-grade technique was applied to the experimental group.

For motivational purposes, one terminal comment of praise like "well done," "good content," or "good revision" was placed on all compositions and their revisions in both groups. Papers in the control group received A's, B's, C's, and D's, compared to the A's and B's of the experimental group.

During the last two weeks of the quarter students in both groups

worked in Chapter 6 of The Writing Clinic, which covered complex sentences. It was during these ninth and tenth weeks that three posttest compositions were written. The posttest compositions were assigned in the same manner as the pretest compositions, and the same three sets of instructions were used. Posttest compositions ranged from 110-330 words with a mean of 192.2 words, somewhat shorter than the pretest compositions. During these last two weeks each student also completed an anonymous instrument to express the degree of satisfaction with course procedures in writing and revising compositions.

RESEARCH INSTRUMENTS

Writing improvement was measured in terms of the growth in the length of T-units and the reduction in the frequency of errors per 100 words. Hunt (1965) had determined that the T-unit (one independent clause with its attached or embedded subordinate clauses, if any) was a statistically significant and objective measure of syntactic maturity that increased in length as writers added more optional elements to their independent clauses. Braddock, Lloyd-Jones, and Schoer (1963), on the other hand, described the value of a frequency count in contrast to rating procedures in terms of its "potential for describing a composition in fairly objective terms."

Errors were considered as occurrences of inappropriate items of grammar, usage, punctuation, and spelling as indicated in the Harbrace College Handbook (Hodges and Whitten, 1972) and Webster's New World Dictionary (1970) for standard English. An item was considered an error when either reference prohibited it without exceptions or options and when it was so identified by

the researcher and a second reader.

Student satisfaction with course procedures in writing and revising compositions was measured by a semantic differential. Kerlinger (1964) suggested that a semantic differential might be devised by investigators for measuring attitude. The semantic differential used in this study consisted of eleven bipolar adjective pairs prepared for rating the single concept "Writing and Revising Papers in This Course." The concept was rated by circling one of the numbers along the 7-point scale between each pole:

0 = neutral 1 = slightly 2 = very 3 = extremely

TOPIC: Writing and Revising Papers in This Course

valuable	3	2	1	0	1	2	3	worthless
fair	3	2	1	0	1	2	3	unfair
shallow	3	2	1	0	1	2	3	deep
honest	3	2	1	0	1	2	3	dishonest
passive	3	2	1	0	1	2	3	active
nice	3	2	1	0	1	2	3	awful
weak	3	2	1	0	1	2	3	strong
slow	3	2	1	0	1	2	3	fast
bad	3	2	1	0	1	2	3	good
pleasant	3	2	1	0	1	2	3	unpleasant
light	3	2	1	0	1	2	3	heavy

STATISTICAL PROCEDURES

All comparisons made between the control group and the experimental group were tested for statistical significance with the Mann-Whitney U test

for samples larger than 20. Siegel (1956) referred to the Mann-Whitney U test as "one of the most powerful of the nonparametric tests" and "a most useful alternative to the parametric t test when the researcher wishes to avoid the t test's assumptions." A basic assumption of the parametric t test is that the control and experimental groups have pre-experimental sampling equivalence, but the use of naturally assembled groups was a violation of that basic assumption that both groups were normally distributed. Therefore it was necessary to use an alternative test that did not assume pre-experimental sampling equivalence. The nonparametric Mann-Whitney U test makes no such assumption.

All comparisons made within each group for changes between pretest and posttest measures were tested by a matched pairs t test. Klugh (1970) explained that, when the same subjects are used in a pretest-posttest situation, the paired observations are not randomly obtained independent sets of scores. Since this form of the t test does not make the same assumptions as the t test for independent samples, it was used to test the changes within each group.

FINDINGS

There were no statistically significant differences at the .05 probability level between the control and the experimental groups before or after treatment on the measures taken for writing improvement, nor was there a significant difference after treatment on the measure of satisfaction. Changes from pretest to posttest within each group showed only one statistically significant difference at the .05 probability level. There was a

satistically significant change that occurred within the experimental group but not within the control group. The experimental group did significantly reduce the frequency of errors per 100 words, but the difference was not large enough to make a significant difference between the two groups after treatment. See Table 1.

TABLE 1

Results of a Matched Pairs t Test Comparing Pretest-Posttest Changes in Frequency of Errors per 100 words in Control and Experimental Groups

Group	Pretest mean	Posttest mean	df	t	P
Control	10.53	9.25	20	1.49	n.s.
Experimental	14.13	11.41	21	3.16	$<.05$

Several observations were made for the sample of developmental students used in this quasi-experimental study at State Technical Institute at Memphis.

(1) Neither the traditional mark-grade-revise technique of composition revision nor the experimental mark-revise-grade technique led to significant increased syntactic maturity (increased T-unit length) in one academic quarter. Perhaps one quarter was insufficient time for a significant increase to occur, or perhaps such an increase did not occur because the emphasis in the classroom was on correctness of expression rather than syntactic development.

(2) The experimental mark-revise-grade technique of composition re-

vision was more effective in reducing the frequency of errors per 100 words in the experimental group than was the traditional mark-grade-revise technique in reducing errors per 100 words in the control group. Because of the initial similarity of the groups in scores on the American College Test, the pretest compositions, and the learning environment (except for the difference in treatments), the significant reduction of errors in the experimental group but not in the control group was attributed to the experimental treatment itself.

(3) Student satisfaction with course procedures in writing and revising papers was not significantly different for either group on the semantic differential. Perhaps this finding was the result of student distrust of the anonymity of the rating instrument, a general tendency among students at State Technical Institute at Memphis to avoid negative evaluations of instruction, or the possibility that neither technique of composition revision produced greater satisfaction.

In summary, there was some evidence that the experimental techniques of revising papers after they were marked but before they were graded was superior to the traditional technique for the sample used in this study as a means of reducing errors in grammar, usage, punctuation, and spelling, but not as a means of increasing T-unit length or generating greater satisfaction with course procedures in writing and revising papers. However, the need for further research was indicated.

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